



ENVIRONMENTAL MONITOR



Vol.7, No. 2

A Quarterly Publication of the Army Southern Regional Environmental Office

Second Edition

DOD, EPA LEADERS EMPHASIZE VALUE OF STRONG PARTNERSHIPS, ENVIRONMENTAL MANAGEMENT AT ANNUAL REGION 4 ENVIRONMENTAL CONFERENCE

by Adriane Miller, Project Manager, U.S. Army Environmental Center—Northern Regional Environmental Office



In 2002, the military mission is in clearer focus than ever for the Department of Defense. So, also, is its commitment to environmental stewardship. That message rang repeatedly throughout the 2002 Region 4 Environmental Conference, June 25-27 in Atlanta. Nearly 400 representatives from DOD and the military services, Environmental Protection Agency, state regulatory agencies and private industry attended the conference. Its theme: "Preserving Our Homeland, Our Nation, Our Environment." U.S. EPA/Region 4 and DOD co-sponsored the annual event.

"A healthy and productive environment is a fundamental component of national power," said John P. Woodley, Jr., Assistant Deputy Under Secretary of Defense for Environment, during the opening address June 25. "Sound environmental stewardship is a reflection of the high moral and ethical ideals of soldiers, sailors, airmen and marines—indeed of the nation as a whole. They expect this and they will not be disappointed."

Sound environmental stewardship requires strong environmental leadership, Mr. Woodley said. "One indisputable fact about the future of environmental management stands out: Unless your environmental program is integrated with your operations, it cannot be successful in the long run. We can't

define our success as 'compliance.' Success must be defined in terms of reducing environmental risks and costs inherent in our operations."

Stan Meiburg, EPA Region 4 Deputy Regional Administrator, gave an overview of U.S. EPA priorities for military installations. Dr. Meiburg said water quantity and quality, productive use and reuse of land, and community involve-

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“A REGIONAL PERSPECTIVE”

As we approach the end of another fiscal year, many things come to mind. It's so easy to get engrossed with the many unanswered questions and the on-going debates between the regulatory communities and the military, but that's not very productive...or inspiring. So instead, I've chosen to remember the many memorable events involving good folks from the regulatory communities, academia, special interest groups, the four military services, other federal agencies, and many others who would prefer to keep working quietly in the background. A few items quickly pop up like a month ago when the funding arrived for testing a very unique approach to technology transfer involving the military and the university network in the Southeast. In essence, it's a low budget, “bottoms up” effort focused on real installation/base issues using our existing P2 partnership forums as its rudder. The desire is to “jump start” certain programs like EMS way before what would have otherwise been possible...I then remembered the Georgia fee issue that was finally resolved after a 7-year disagreement thanks to some very “solution-oriented” attorneys...next was Georgia entering the DSMOA family, Ft Bragg's and FORSCOM's great Sustainability initiative, the maturation of the Kentucky clean-up partnership such that real progress is within grasp, and many new, exciting initiatives to hedge against military/community incompatibilities. My thoughts probably came to a head at our annual conference where EPA, the 8 States, Fish & Wildlife, the Forest Service, the Corps of Engineers, and many others really focused more on our commonalities rather than our differences. In fact, the feedback from the conference attendees was that this was the best forum held to date so I really hope more people will be able to join us next year.

Interestingly, any time I reflect on the past year, I ultimately think about the people – and not the things. As we know, people are what make the difference in any program, but never more so than in this business. I know for the Army, the year ahead will be unparalleled in terms of change for how we do business; but, on the bright side, most of the people will be the same...and that's what makes this business so personal.

In fact, I recently read a very moving tribute in a FORSCOM newsletter about someone that I only knew briefly; however, below I have taken a few excerpts from that article honoring a great person, David McKivergan. David was a great teacher, and his memory is still teaching us today.

“When most of us think of an archaeologist we think of Indiana Jones, the archaeologist played in the movies by Harrison Ford. His swashbuckling adventures are meant to entertain and do they ever! At Fort Stewart, we too had an archaeologist who was a different sort of hero. His name was David McKivergan.

He didn't pack a pearl handled pistol but his smile was fast and his heart was true! He gave back to Fort Stewart that which was lost: our history. Much of what we know about Fort Stewart today was not known previously, except for the work that David McKivergan initiated in 1995.

At Fort Stewart and Hunter Army Airfield, archaeologists work for the DPW and, unlike the portrayal of archaeologists in the movies, real archaeologists work hard to protect cultural resources. They support the 3rd ID mission by ensuring that training areas are available and that training does not inadvertently destroy our cultural resources...

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ENVIRONMENTAL MONITOR

The Environmental Monitor is an unofficial publication authorized under the provisions of AR 360-81. It is published on a quarterly basis by the U.S. Army Environmental Center Public Affairs Office. Editorial views and opinions expressed are not necessarily those of the Department of the Army. Article submissions are welcomed, and should be submitted to the SREO two months before issue date. Send all submissions via facsimile to (404) 524-5162 or electronically to environmental.specialist@sreo.army.mil.

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ment are high on the list of concerns for U.S. EPA Administrator Christine Todd Whitman. EMS also will grow in importance, he said.

"There is tremendous potential with EMS," Dr. Meiburg said. "Simply having to pay attention can improve performance. We recognize this looks a little scary. But EPA will never have the resources to inspect everything. EMSs allow installations and companies to address issues before they become problems."

Dr. Meiburg emphasized the value of effective partnerships among government agencies, services and the community. He likened partnerships to a robust toolbox. "Not every tool is right for every problem. But the more tools in the partnership, the more likely you are to have the right one to solve the problem."

At a conference luncheon June 26, motivational speaker Ken Futch entertained attendees with his humorous delivery of an inspirational message—there's value in admitting what you don't know. Learn to trust each other, he said. Expect goodness to happen.

"If you go through this world looking for people to (take advantage of) you, they will oblige you." Take risks. Keep an open mind. Above all else, Mr. Futch said, "Seize the day."

During the conference, representatives from state regulatory agencies discussed the makings of effective state-military partnerships for environmental safety and occupational health, and the challenges and opportunities for sustainment and growth. Maureen Sullivan of the Office of the Secretary of Defense offered suggestions for building and implementing Environmental Management Systems. "Don't look at an EMS as new work. Look at it as a new way to do existing work," she offered.

Karl Rabago of Cargill Dow described how his company is working to develop a sustainable product—plastic—out of sugar, a renewable resource. "Growing demand is on a collision course with declining resources," Mr. Rabago said.

"If we keep going the way we have been without significant change, we've got fundamental problems associated with natural resources that make all of our prosperity, all of our welfare possible."

No magic solution exists, he said. "Start assessing your impacts. Make a commitment to act once you've made that assessment. Measure results, engage the public and work with them."

"In nature, waste is food—we need to mimic nature in that regard," Mr. Rabago added. "Our equity is natural capital, and we need to start reinvesting in it. What we make has to be connected to how we use it."

"For the military, your key concern is security. Energy availability is just as important as weapons availability. Security is freedom from fear of privatization or want. Security and sustainability are parallel constructs."

"Environmental resource insecurity will be the primary cause of instability in this century," Mr. Rabago predicted. "If a conflict occurs, the more sustainable we are, the more resources will be available to deal with that conflict."

Jon Watson, a special agent in Atlanta with the Federal Bureau of Investigation Joint Task Force for Terrorism, presented a briefing on the environmental implications of terrorism. He also discussed the breakdown that allowed the September 11 attacks to occur.

"Everywhere I go, people want to know—where did we fail?" Mr. Watson said. "Communication? Coordination? There was no failure there. We had a failure of imagination on 9/11. Never did we imagine we'd be faced with these types of challenges. We were reminded that the U.S. is vulnerable to terrorism. We were reminded that freedom is not free. How arrogant to think we would not be called to sacrifice."

"Our real enemy is apathy," he added. "Preparedness and planning are our effective weapons." He called on conference attendees to assume a personal responsibility for the preservation of freedom.

"If not here, where? If not now, when? If not you, who?"

George Carellas, the DoD Regional Environmental Coordinator for EPA

Region 4 captured the essence of the Conference best when he stated that "The true picture of who we are and what we stand for – a nation strong in will, a nation blessed with great beauty, a people of strong national pride, partners in military readiness – environmental stewardship were evident throughout the Conference. We truly captured the essence of our THEME: 'Preserving Our Homeland, Our Nation, Our Environment.'"



DOD CALLS FOR MERGING ENVIRONMENTAL MANAGEMENT INTO CORE AREAS

The Defense Department has issued an environmental management policy that says all military components shall adopt an environmental management system (EMS) and work to integrate it into all core business areas. "Our goal is to establish robust systems that sustain compliance, avoid risk and pollution, inform the public, and promote interoperability among the DoD Components, other nations' militaries, and with industry," says the policy, signed April 5 by DOD acquisition chief E.C. "Pete" Aldridge Jr. The policy is available on InsideEPA.com, is a management plan under which a facility or company integrates the consideration of environmental practices into every day decision-making.

DOD has been gradually moving toward a greater embrace of EMSs for several years now, especially after then-President Clinton issued Executive Order 13148, "Greening the Government Through Leadership in Environmental Management," which requires federal agencies to adopt management approaches aimed at continual environmental improvement by the end of 2005. And DOD's environment chief last year announced that this was his top priority (Defense Environment Alert, Dec. 18, 2001, p11).

The head of the White House Council on Environmental Quality, James Connaughton, says in a statement that the White House supports DOD's adoption of this policy, noting that the EMS approach is an important part of President Bush's management and stewardship agenda.

An April 23 DOD press release says the policy is not a new requirement but a change in management practices. "The Department's approach is to adopt existing management processes so they systematically identify and reduce the environmental risks inherent in mission activities," the press release says. "This systematic approach is intended to make compliance with environmental laws simpler, less costly, and a routine part of mission planning and execution. DoD believes this will enhance mission performance while it reduces environmental costs and liabilities."

Raymond DuBois, DOD deputy under secretary for installations & environment, notes in a statement that balancing the military's training and operational needs with environmental stewardship is an increasingly complex challenge. But "Environmental Management Systems are a proven tool for defining and achieving this balance," he says.

"The importance of our missions demands this commitment to continual improvement in our environmental management systems. This is an untapped resource for improving our overall mission performance," the policy says.

The military components may adopt an EMS that complies with an international standard, known as ISO 14001, but DOD says the components should pursue third-party registration only when it provides a "clear and documented benefit to the mission." At a minimum, the EMS should meet the requirements of the executive order, the policy says. Additionally DOD components are encouraged to implement a complementary management system for safety and occupational health, although this is not a requirement.

The policy outlines five components that a DOD EMS shall include:

- * Public commitment by senior leaders to environmental compliance, pollution prevention and continual improvement of the management system;
- * Integrated planning, including goals and targets for reducing environmental impacts and supporting mission priorities;
- * Operations to assure attainment of these goals and targets, and training to ensure individual competence and responsibility;
- * Procedures for self-evaluation and corrective actions, including priority inclusion of identified needs in budget processes; and
- * Periodic review of the management system by senior leadership, with recommendations for improvement and publication of the review.

The EMS program was discussed at this year's Region 4/EPA/DoD/States Environmental Conference. For more information on this topic contact Roc Tschirhart at Army Environmental Policy Institute 404-524-9364 or email: rtschirhart at or Ed Engbert at Southern Regional Environmental Office at 404-524-5061 or email: eengbert@sreo.army.mil

DOD RELEASES MUNITIONS ACTION PLAN

The Department of Defense today announced the release of the Munitions Action Plan, a critical element of the Pentagon's ongoing commitment to the readiness of America's men and women in uniform and effective stewardship of the environment.

The goal of the plan is to provide a comprehensive and consistent approach to managing military munitions across the munitions life cycle. DoD leadership will use the plan to protect and enhance force readiness, maximize explosive safety and minimize the environmental impact of military weapons. "Equipping and training our armed forces with the right munitions -- for the right mission, at the right time -- is central to our ability to fight and win the nation's wars," said Deputy Secretary of Defense Paul Wolfowitz. "Implementing the Munitions Action Plan will improve munitions management and is an important step in our efforts to address the challenges to force readiness."

The plan applies only to conventional military munitions and contains 29 specific objectives that are designed to result in faster, better and more cost-effective accomplishments of common goals for the military during what is referred to as the "munitions life cycle."

The "munitions life cycle" consists of five phases:

- Acquiring and producing munitions
- Using munitions on test and training ranges
- Managing the stockpile of military munitions
- Demilitarizing (making into scrap) excess, obsolete or unserviceable munitions
- Dealing with munitions left on ranges no longer operational

Created by DoD's Operational and Environmental Executive Committee for Munitions, comments and input from the public regulators were considered in the plan's earliest development stages. The plan has been distributed to a wide variety of public and regulatory stakeholders whose input will be reflected in future, updated versions of the document. Full text of the Munitions Action Plan may be found at <https://www.denix.osd.mil/mapcrd>.

Article taken with permission from Defense Environmental Alert 23 April 2002

ARMY GUIDANCE PROHIBITS LAND USE CONTROLS ENFORCEMENT IN RODS

A recent Army policy on land use control (LUC) issues echoes an Air Force guidance signed earlier this year, stipulating that the Army shall not include details pertaining to LUC enforcement, monitoring or reporting in cleanup decision documents such as records of decision (RODs). The policy runs counter to EPA's position on the issue.

The April 25 memorandum from Maj. Gen. R.L. Van Antwerp, the Army Assistant Chief of Staff for Installation Management, notes that the Defense Department and EPA have disagreed over how to enforce LUCs at a number of sites, which has led to restoration delays. "Accordingly, this guidance provides a process to be used until further guidance is developed to avoid such potential delays," the memorandum says. The guidance is available on InsideEPA.com.

The Air Force's similar guidance, issued in late January, prompted a formal dispute between EPA Region III and Air Force officials over cleanup activities at Langley Air Force Base, VA (Defense Environment Alert, March 26, p6). And top Air Force and EPA officials are trying to forge a new policy that will satisfy both sides (Defense Environment Alert, May 7, p13).

At issue is whether the military or EPA has final authority for cleanup requirements. The Air Force has said it will issue its own RODs if EPA insists on including LUC implementation language in decision documents. But EPA says the military lacks the authority under the Superfund law to independently issue RODs. The Army policy is less assertive, telling major commands and installations that they should immediately notify Army headquarters if a regulatory agency refuses to sign a ROD because of LUC issues and also should submit the disputed ROD through their chain of command for further guidance.

The Army policy says the service will continue to follow the process for documenting LUCs outlined in an August 2001 policy. "More specifically, the Army shall include the following information about LUC(s) in the decision document:

- * "the type of land use control;
- * "the reasonably anticipated future land use;
- * "the location and source of the contamination that the control addresses;
- * "the role of the LUC in achieving the remedial action objective;
- * "the means for terminating and/or modifying the control."

The guidance continues to say that details pertaining to LUC enforcement, monitoring or reporting should not be included in RODs, but should instead be documented in a secondary implementation plan. "On a case-specific basis, the Army may enter voluntary agreements with regulatory agencies that identify LUC implementation activities and responsibilities. Such agreements will not be appended to -- or otherwise associated with -- formal remedial decision documents," the policy says.

Article taken with permission from Defense Environmental Alert 21 May 2002

SUSTAINABILITY IN ACTION

Being Good Neighbors with a Military Installation

By Elizabeth Wright
Contributing Writer

"We all win by living and working in an environment that is responsible." Those were the words of Brigadier General Robert W. Mixon, Deputy Commanding General of Fort Carson, earlier this year as he opened a meeting to release Fort Carson's Noise Management Plan. Like most military installations, Fort Carson was once located in a fairly isolated and rural region. It was originally established as Camp Carson, a temporary post, in 1942. As World War II ended, it was slated for closure; however, in 1954 the War Department instead designated Fort Carson as a permanent fort. In those days, the City of Colorado Springs had only a fragment of the more than 300,000 people who populate the area today. However, as the city expanded, the installation suddenly became enveloped in the residential community.

Now noise management is becoming a significant issue. According to the U.S. Army Center for Health Promotion and Preventive Medicine, the annual cost of noise issues for the Army including damage claims, the handling of complaints, land acquisition, range closure, and decreased training capability is around \$22 million dollars. Having an installation with tanks, artillery, and Apache helicopters right down the street is not necessarily an ideal situation for most homeowners. But it is reality, and while the homeowners want quiet neighborhoods, the military's mission is national security, and this cannot be fulfilled without hours of training, training that sometimes can be loud and at times must be performed during the night. But Fort Carson prides itself as being both a good neighbor and an integral part of the community.

As communities grow, noise complaints are becoming common issues for military installations. Fort Carson is being proactive on the matter by upgrading the monitoring system with 14 new noise monitors, which will be installed around post by early summer. Noise monitors will also be placed in neighboring communities to measure the noise levels experienced by the residents. This new system sends noise data to the environmental directorate using telemetry and is powered by solar energy. The new monitoring system replaces an older system that was unable to discriminate between a gust of wind and a blast from Fort Carson.

The data collected by the previously used system was more than 95 percent "wind events". Until the new system became available in late 1999, monitors were not able to discriminate between noise sources. The new monitors use two sensors, geophones and microphones. The geophones, which were originally designed to detect nuclear blasts half way around the earth, act as a trigger to signal an incoming blast event. When a sound wave travels over the earth it causes a seismic wave, similar to a ripple in the soil, which is compared with the sound wave. Wind gusts do not cause a seismic wave, and therefore are not entered

into the noise data. Four of the 14 monitors will be trailer-mounted to provide mobility and flexibility. Should a Fort Carson neighbor request noise monitoring in their specific area, one of the trailer-mounted monitors can be positioned to determine the level of the noise at that location.

Additionally, six more monitors will be installed around post later this year. Fort Carson has purchased the monitors and developed a Noise Management Plan in a continued proactive effort to gather data and keep the public informed. In 1999, only three noise complaints were registered at Fort Carson. However, by April already 15 complaints had been filed in the year 2000. When a complaint is registered, the Public Affairs Office promptly follows up on the matter.

Historically, the community around Ft. Carson is usually only disturbed by noise when there is low cloud cover or a temperature inversion. Noise during the night is particularly bothersome, but the community needs to be aware of the fact that the Army fights, and more importantly wins, by night battle. Desert Storm is a perfect example of this. If the Army does not conduct night training then our Army would not be adequately prepared for night fighting, which is essential to the military's mission. The military must train as they fight. In February, the Directorate of Environmental Compliance and Management (DECAM) at Fort Carson helped create and release the Environmental Noise Management Plan, which includes information on the new noise monitoring system and public education initiatives. DECAM, along with the Public Affairs Office, G3 Aviation, and the Colorado Air National Guard, is currently implementing that plan.

A workgroup has formed that will begin meeting to continually address any noise issues at Fort Carson. Plus, the Public Affairs Office is increasing efforts to keep citizens living near Fort Carson aware of the reasons for military training and informing them of increased training levels dictated by preparing soldiers for deployment. "Our efforts are education, and mitigation where possible," said Nelson Kelm with DECAM. Fort Carson is also meeting with regional realtor associations, developers, and land planners to educate them and distribute maps indicating the impact of noise from the installation.

Fort Carson hopes that this will help ensure that homeowners are fully aware of the military installation and its impact on the community prior to purchasing a house in the vicinity of Fort Carson. This issue recently came to light in Hawaii, when the Mililani Mauka subdivision developed bordering the Army's East Range training area. Residents of the subdivision soon began complaining of shaking windows, low-flying helicopters, and artillery fire at all hours of the night. At a Mililani Mauka Neighborhood Board meeting in April, the housing developer admitted it could have made a greater effort to notify perspective homebuyers of the impact on the neighborhood from the East Range. Some residents even claim that the developer had erroneously informed them that the Army had to comply

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MILITARY DEVELOPING PROTOCOL FOR WATERSHED IMPACT ASSESSMENTS

The Defense Department expects to finalize a protocol this summer to help mission-essential installations determine their impacts on local watersheds. Over the past several years the executive branch has placed a greater emphasis on responding to clean water issues, especially nonpoint discharges, on a regional basis. Although DOD has been a part of these initiatives, the military had no standard approach for identifying its impacts, according to officials involved in the protocol development process.

The benefits of the protocol, which has been pilot tested at a variety of Army, Navy, Air Force and Marine Corps installations, include having a holistic approach to clean water compliance issues, allowing a quick response to changes in water regulations, justifying future budget requests and possibly reducing environmental liabilities, said Georgette Myers of the Army Environmental Center. For example, each activity on a base is usually aware of its discharge impacts, but bases rarely look cumulatively at their impacts, she said. Myers and Heather Cisar, a contractor helping to develop the protocol, outlined the military's watershed assessment effort March 27 at the National Defense Industrial Association's 28th Environmental and Energy Symposium in Charleston, SC.

The Army took the lead to develop the protocol, but it is designed for use by all the services. Myers said initially the assessment protocol had a very broad scope, but the Army refined it over time to focus mainly on state-implemented discharge limits known as total maximum daily loads.

The objectives of the protocol development were to have a standard, step-by-step method, using key EPA performance metrics, to assess the military's impacts to the land around installations, Myers said. Myers and the other protocol developers also wanted the process to be simple, allowing installations to use existing data, identify innovative yet proven solutions to minimize discharge impacts, and identify partnerships and funding sources, she said. For example, it might be difficult for an installation to receive funding for a watershed-related pollution prevention initiative, but if the base was part of a regional partnership that included a community-based organization eligible for non-DOD funding, that regional project could also help the military, she said.

The bases that will probably find the protocol the most useful are those that have discharges into impaired watersheds, have recurring Clean Water Act non-compliance problems and have been identified by DOD as being mission essential, she said.

The draft protocol has six phases, beginning with a quick screening analysis to determine whether an installation needs to conduct a watershed impact analysis, Cisar said. The second phase identifies an installation's watershed, assesses the vulnerability of receiving waters in the watershed, and selects key performance metrics. In the third step, an installation develops its baseline and identifies its impacts. Part four is to develop solutions that will reduce a base's impacts for the lowest cost. The solutions should be focused on upstream causes, or pollution prevention, rather than symptoms in the water body, she said. Phase five provides guidance on identifying partners and funding sources, while the last phase is to implement solutions, track progress and reassess the impacts periodically.

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with a 10 p.m. curfew for training activities. By creating maps outlining the noise zones and meeting with realtors, Fort Carson hopes to avoid a similar situation in Colorado. As communities expand, look for noise management to be a more significant factor in many areas, whether it is living next to an airport, a school, or a military installation.

Fort Carson and DoD have shown clear examples on how to be a good neighbor. BG Mixon was right on target; we do all win by living and working in an environment that is responsible. Whether your day is comprised of defending this country or shuttling the kids around, interacting with your community and promptly addressing concerns is always an important part of being a good neighbor and caring for our environment together .

For additional information or questions about the Environmental Noise Management Plan on Fort Carson, please contact Nelson Kelm at (719) 526-1723

NEWS FROM THE MARINES

Camp Lejeune Sustainable Development- A plan for Installations's Futures

Marine Corps Base Camp Lejeune is the primary amphibious warfare training base for the U.S. Marine Corps. The Base encompasses more than 153,000 acres, with 14 miles of beach on the Atlantic Ocean, located along the lower central coast of North Carolina. Base infrastructure includes 450 miles of roads; 37 miles of railroads; an advanced wastewater treatment plant; five water treatment plants; a lined municipal solid waste landfill; and 6,800 buildings and facilities supporting 144,000 Marines and Sailors and their families. Because Camp Lejeune is a very active and growing installation, it is important to establish a sustainable development plan that will lead the installation into the new millennium.

The primary objective of the Camp Lejeune Sustainable Development Plan is to build upon the well established and recognized environmental quality and natural resource management programs at the Base. The major initiatives in Camp Lejeune's program include a Sustainability Guidance Manual, *The Natural Step* Training, and a Sustainable Development Base Order. The Sustainability Guidance Manual establishes the importance of becoming sustainable, a vision of a sustainable Camp Lejeune in 2025, an implementation strategy, barriers to implementation, and projects (current and future) that will make Camp Lejeune a sustainably built, operated, and managed military facility. The plan presents the basis for defining sustainability at Camp Lejeune and provides an approach for developing metrics that allows the determination of progress towards this goal. As such, the plan is the first of its kind within the Department of Defense (DoD) and will, therefore, guide other DoD facilities in their progress toward sustainability.

Camp Lejeune is building on a well established and nationally recognized environmental quality program. Major strides have been made by Camp Lejeune in pollution prevention, natural resource management, air quality, and hazardous waste reduction. Moving to a program that is sustainable is the next goal for Camp Lejeune. The major commands, being led by the Environmental Management Division (EMD), are taking an integrated approach to sustainability through:

- training
- guidance development
- base order development

This approach results in personnel buy-in, understanding of the core principles behind sustainability, and a mandate from the Base commander to implement a sustainable program. Each element is explained in the fol-

lowing subsections, along with associated goals of each program and how these goals will play into the overall sustainable development plan at Camp Lejeune.

The program began in October 1999 with the collection of data from the installation's various commands and departments. This data was summarized in a Data Development Technical Memorandum (TM). The TM summarized:

- ❑ the daily activities aboard the installation,
- ❑ any sustainable efforts being incorporated into those activities, any additional sustainable opportunities that could be implemented, and
- ❑ exemplary projects from other military and civilian sources.

These exemplary projects would serve as a platform to measure Camp Lejeune and identify new opportunities to enhance sustainability.

The next phase of the program involved a two-day workshop facilitated by the project consulting firm of CH2M HILL and two world-renowned experts in environmental sustainability, Mr. Paul Hawken and Mr. Amory Lovins. Representatives from every command and department were invited to attend the workshop. Participants reviewed and discussed the TM, identified candidate sustainable development opportunities for future implementation at the installation, and selected and prioritized the sustainable development practices to be addressed in an Environmental Sustainability Guidance Manual (ESGM).

The workshop served as an integral portion of the program because it involved group education and feedback from the envisioned users of the ESGM. The ESGM is outlined further in a later section of this paper. As part of the sustainable development plan for Camp Lejeune, EMD developed an ESGM. The ESGM provides Camp Lejeune with a platform for enhancing mission readiness while moving toward a support infrastructure that is sustainable and often times more cost-effective than traditional practices that are not sustainable – ultimately saving money.

The ESGM will assist commanders and department managers in planning, developing, and implementing sustainable operations over the next 25 to 50 years. Initially, the ESGM presents several key goals that, if achieved, would bring the Base closer to sustainability:

- ◆ Eliminate or minimize the source of pollution.
- ◆ Shift energy demands to a renewable alternative or a less polluting alternative.
- ◆ Maximize the efficiency of the system.

The ESGM also presents various

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regulatory drivers and Executive Orders (EOs) that alone, do not directly require the Base to implement an integrated sustainability program. As a set, however, these mandates impel and guide Camp Lejeune toward sustainability on several fronts. Several of the EOs and developed guidances are described in the following:

The 1999 Sustainable Planning – A Multi-Service Assessment by the Naval Facilities Engineering Command (NAVFAC) reviews all federal laws, policies, and guidances on subjects related to sustainability and notes no single source of authority that mandates sustainability.

Recent EOs and NAVFAC Planning and Policy Statements have led federal agencies, and the Navy/Marines in particular, to aggressively move facilities and operations toward sustainability. These include:

- ❑ **EO 13101**, Greening the Government through Waste Prevention, Recycling and Federal Acquisition
- ❑ **EO 13123**, Greening the Government through Efficient Energy Management
- ❑ **EO 13134**, Developing and Promoting Biobased Products and Bioenergy
- ❑ **EO 13148**, Greening the Government through Leadership in Environmental Management
- ❑ **EO 13149**, Greening the Government through Federal Fleet and Transportation Efficiency
- ❑ **NAVFAC Statements 98-02 and 98-03** on the design of sustainable facilities and infrastructure

The significant conclusion that can be drawn from reviewing the above documents is that there is ample empowerment from diverse levels of the federal government for military branches, bases, or commands to apply the principles of sustainability to their operations.

The ESGM approaches sustainability at Camp Lejeune by identifying eight operational categories to facilitate metric development, implementation strategies, and project development. When combined, these operational categories span all aspects of sustainability.

These operational categories are: Water Resource Management, Transportation Systems, Energy Management, Building Systems, Natural Resource Management, Procurement, Solid and Hazardous Waste Management, and Air Quality.

There are significant obstacles to any new way of doing business. Rather than ignore obstacles, the ESGM highlights them to ensure that the implementers know what to expect and can develop strategies to overcome roadblocks. Among the general obstacles to implementation are the following: old attitudes, conflicting goals, short-term cost savings, multiple sources of money, existing regulations, inertia and lack of understanding.

Very aggressive long-term goals were developed for each operational category. These goals were developed for the year 2025 with the criteria that they will be maintainable and will provide a foundation for sustainable practices for the Base. In addition, to support the Base in achieving each goal, specific projects were developed. For each project, background information, barriers to implementation, economic analyses, and vendors were provided.

Sustainable development is a concept that has many definitions based on the context, but the general intent of the definition is constant. Essentially, the term implies development or practices that accommodate **social, environmental, and economic** needs using a balanced approach that strives to achieve vitality in all three. With growing emphasis in budget cuts and maximizing our resources to reduce costs, emphasis on economics will be a key factor in sustainability implementation at Camp Lejeune. In the ESGM, we have conducted full economic analysis of each program or project that could be implemented. A key criteria for evaluation is return-on-investment and because of that, we have identified those projects and programs that will ultimately save the Base in capital and operating funds over the next five to ten years.

As such, when funding is made available, the Base Order and ESGM provide the guidance and system for implementing sustainability at Camp Lejeune in a cost-effective manner. Developing the prescribed organization with personnel who are persistent in the implementation of the Guide will most certainly lead to a more sustainable Camp Lejeune.

DoD CELEBRATES EARTH DAY 2002

Florida base celebrates Earth Day

A partnership of Eglin Air Force Base, The Nature Conservancy and local organizations are sponsoring one of the largest educational Earth Day events in the nation at the City of Niceville Mullet Festival Site. The free event is expected to draw more than 25,000 public attendees on Apr. 21, and approximately 12,000 students from Okaloosa, Walton, and Santa Rosa County on Apr. 22-23. The hosts of Northwest Florida Community Earth Day are setting up the event at the Mullet Festival site in Niceville to house more than 200 exhibits and displays that will focus on educating the youth in this area about caring for the environment. The event will have a theme park-like feel with Animal World, Plant World, Energy World, Water World, History World, Waste Free World, and Career World.

The partners include: Eglin Air Force Base, Chelco, Gulf Power, Okaloosa Gas, Santa Rosa, Okaloosa, and Walton County School Districts, Whiting Field, the City of Niceville, Military Affairs Committees and Chambers of Commerce from the tri-county area, the Gulf Coastal Plains Ecosystem Partnership, Northwest Florida Daily News, and The Radio People.

For more information, contact Mike Spaits at 882-2878, ext. 333.

EARTH DAY AT ZOO ATLANTA

Earth Day 2001 at Zoo Atlanta held on April 27th and 28th featured a variety of exciting events appealing to all age groups. The event started with a VIP breakfast on the 27th designed to promote an open exchange of information and beneficial relationships. Attendees included representatives from sponsoring organizations and other key figures from this region.

This year over 16,000 Atlanta-area school children and the general public attended the two-day event. Exhibitors educated visitors about the importance of practicing sound environmental stewardship. Invited exhibitors included the US Army, the Army Corps of Engineers, the US EPA, US Fish & Wildlife Service, AT&T, The Nature Conservancy, the Georgia Department of Natural Resources, the US Forest Service, the Georgia Conservancy and many more!!!

A variety of informative -- yet entertaining -- events were scheduled for both days. Performances, animal feedings and training throughout the days helped guests celebrate our world's natural wonders.

George Carellas, DoD Region 4 Chief welcomed everyone to the annual Earth Day celebration. Major General Donald gave a rousing environmental greeting that set the stage for what has become a great tradition for the military. The crowds were awed by the youth precision drill team sponsored by the Georgia National Guard.

Earth Day 2001 offered an excellent opportunity to meet -- and build partnerships -- with the leadership of other organizations committed to preserving the environment. The event proved to be an opportune time to spread the importance of environmental awareness while enjoying watching the wonder on the faces of children as they learn about their world.

Anniston Army Depot Celebrates Earth Day 2002

By Erin Jackson, PAO, and Tracy Williams, P2 Program Manager



Earth Day was celebrated a little differently this year. In addition to the recurring Earth Day Birdhouse, Poster, and Slogan contests, employees from around the depot combined their talents and efforts to produce a video that was a takeoff of a tape entitled ***Captain Planet and the Planeteers***. The final product about pollution prevention and what individuals can do individually and collectively to save the planet was shown on LAN. Shown are some of the participants in the video.

Also, the Environmental Office and the Recycling Center co-sponsored a month-long Recycle-Thon/Clean-up Days in conjunction with National Clean-up Files Day, sponsored by the U.S. Conference of Mayors.



Participants in the Earth Day Birdhouse Contest were required to submit a statement with their entries explaining how they used recycling and other 'environmentally friendly' practices in building their birdhouses. Three of the five birdhouse building winners are shown.

Students at Coldwater Elementary School, our adopt-a-school, recently participated in an Earth-Day awards ceremony. Students in Kindergarten through 3rd grade submitted posters depicting earth day activities or how to save the environment while the students in the remaining grades – 4th through 6th – submitted short essays on the meaning of Earth Day. Prizes were awarded to the first, second and third place winners as well as to those receiving honorable mention for their efforts. Essay winners were chosen based on grammar, content, and neatness. The winners were given gift cards to Books-A-Million and an Earth day t-shirt. All participants received a certificate of recognition for their efforts.



After the ceremony, the winners of the Earth Day contests posed for a group photo outside the school.

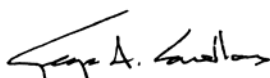
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In a mere three years after Dave begun the Installation's Cultural Resources Program, it ranked the best in FORSCOM and earned Ft Stewart the 1998 DOD Honorable Mention Award. Mr. Tom Fry, Chief of Environmental and Natural Resources Division, who knew David well, said that he was uniquely suited to being an archaeologist. 'David could show you a piece of pottery and help you to see the hands that formed it, the family that ate from it and the lives that relied upon it. He could help others to see how to transcend the differences in time and space and more importantly how to overcome the differences we have with those people who lived so long ago. His big heart always brought people together.' That was his work, and it was how he lived his life. **It was how he changed the lives of all those he came into contact with until he passed away on 23 June 2000...**

The work Dave began lives on through others and last year, FORSCOM created a special award in honor of his many accomplishments and devotion to cultural resources management...

Dr. McKivergan gave us an ability to transcend our differences and to connect with our common humanity, including our past ancestors. That was his work but it was also his gift, to help each of us overcome our differences and to recognize how we are all brothers and sisters and that those bonds can also transcend time."

What else can be said...Randy Powell-Jones and Tom Fry's words are a great tribute not only to Dave, but also to the many folks passionately going about their work to make our lives, our military, and our environment better. That's what will be remembered years from now. That's what this is all about.



George A. Carellas
Department of Defense
Regional Environmental Coordinator

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